ecting via Winsock to STN at stnc.cas.org on port 23

Welcome to STN International! Enter x:X

LOGINID:SSPTASMR1614

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	NOV 22	Higher System Limits Increase the Power of STN Substance-Based Searching
NEWS 3	NOV 24	Search an additional 46,850 records with MEDLINE backfile extension to 1946
NEWS 4	DEC 14	New PNK Field Allows More Precise Crossover among STN Patent Databases
NEWS 5	DEC 18	ReaxysFile available on STN
NEWS 6	DEC 21	CAS Learning Solutions -- a new online training experience
NEWS 7	DEC 22	Value-Added Indexing Improves Access to World Traditional Medicine Patents in CAplus
NEWS 8	JAN 24	The new and enhanced DPCI file on STN has been released
NEWS 9	JAN 26	Improved Timeliness of CAS Indexing Adds Value to USPATFULL and USPAT2 Chemistry Patents
NEWS 10	JAN 26	Updated MeSH vocabulary, new structured abstracts, and other enhancements improve searching in STN reload of MEDLINE
NEWS 11	JAN 28	CABA will be updated weekly
NEWS 12	FEB 23	PCTFULL file on STN completely reloaded
NEWS 13	FEB 23	STN AnaVist Test Projects Now Available for Qualified Customers
NEWS 14	FEB 25	LPCI will be replaced by LDPCI
NEWS 15	MAR 07	Pricing for SELECTing Patent, Application, and Priority Numbers in the USPAT and IFI Database Families is Now Consistent with Similar Patent Databases on STN
NEWS 16	APR 26	Expanded Swedish Patent Application Coverage in CA/CAplus Provides More Current and Complete Information
NEWS 17	APR 28	The DWPI (files WPINDEX, WPIDS and WPIX) on STN have been enhanced with thesauri for the European Patent Classifications
NEWS 18	MAY 02	MEDLINE Improvements Provide Fast and Simple Access to DOI and Chemical Name Information
NEWS 19	MAY 12	European Patent Classification thesauri added to the INPADOC files, PCTFULL, GBFULL and FRFULL
NEWS 20	MAY 23	Enhanced performance of STN biosequence searches
NEWS 21	MAY 23	Free Trial of the Numeric Property Search Feature in PCTFULL on STN
NEWS 22	JUN 20	STN on the Web Enhanced with New Patent Family Assistant and Updated Structure Plug-In
NEWS 23	JUN 20	INPADOC databases enhanced with first page images
NEWS 24	JUN 20	PATDPA database updates to end in June 2011
NEWS 25	JUN 21	INPADOC: Delay of German patent coverage
NEWS 26	JUN 26	MARPAT Enhancements Save Time and Increase Usability
NEWS 27	JUL 25	STN adds Australian patent full-text database, AUPATFULL, including the new numeric search feature.
NEWS 28	AUG 01	CA Sections Added to ACS Publications Web Editions Platform

```
 NEWS EXPRESS 17 DECEMBER 2010 CURRENT WINDOWS VERSION IS V8.4.2 .1,
              AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2011.

 NEWS HOURS     STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN     Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN customer
  agreement.  This agreement limits use to scientific research.  Use
  for software development or design, implementation of commercial
  gateways, or use of CAS and STN data in the building of commercial
  products is prohibited and may result in loss of user privileges
  and other penalties.

* * * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 23:21:57 ON 03 AUG 2011

=> file reg
COST IN U.S. DOLLARS                                 SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      0.92       0.92

FILE 'REGISTRY' ENTERED AT 23:24:30 ON 03 AUG 2011
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2011 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    2 AUG 2011  HIGHEST RN 1314638-23-7
DICTIONARY FILE UPDATES:   2 AUG 2011  HIGHEST RN 1314638-23-7

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

TSCA INFORMATION NOW CURRENT THROUGH January 14, 2011.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Users\srao3\Documents\STN Express 8.4\Queries\10578053 str 1.str

L1      STRUCTURE UPLOADED

=> s l1 sss full
FULL SEARCH INITIATED 23:25:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      975 TO ITERATE
```

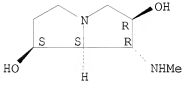
100.0% PROCESSED 975 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.01

L2 3 SEA SSS FUL L1

=> d l2

L2 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2011 ACS on STN
RN 1207673-00-4 REGISTRY
ED Entered STN: 02 Mar 2010
CN 1H-Pyrrolizine-1,6-diol, hexahydro-7-(methylamino)-, (1S,6R,7R,7aS)- (CA INDEX NAME)
FS STEREOSEARCH
MF C8 H16 N2 O2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	199.52	200.44

FILE 'CAPLUS' ENTERED AT 23:25:41 ON 03 AUG 2011
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 3 Aug 2011 VOL 155 ISS 6
FILE LAST UPDATED: 2 Aug 2011 (20110802/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2011
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2011

CAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2011.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2
L3 5 L2

=> d l3 1-5 ibib ab hitstr

L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2010:565635 CAPLUS
DOCUMENT NUMBER: 152:541994
TITLE: Treatment of energy utilization diseases
INVENTOR(S): Wilson, Francis Xavier; Nash, Robert James; Horne, Graeme; Storer, Richard; Tinsley, Jonathan Mark; Roach, Alan Geoffrey
PATENT ASSIGNEE(S): Summit Corporation PLC, UK
SOURCE: PCT Int. Appl., 202 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2010049678	A2	20100506	WO 2009-GB2554	20091027
WO 2010049678	A3	20100826		

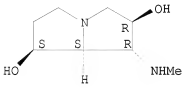
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.:		
GB 2008-19941	A	20081031
GB 2009-6161	A	20090409
GB 2009-8702	A	20090520
GB 2009-14471	A	20090819

OTHER SOURCE(S): MARPAT 152:541994
AB Described are various compds., in particular iminosugars, for the treatment of energy utilization diseases, in particular diabetes (including type 1 diabetes, type 2 diabetes and insulin resistance) and metabolic syndrome (including any disease or disorder associated therewith, for example central obesity and elevated levels of triglycerides).
IT 1207673-00-4
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of imino-sugars and C-glycosides for treatment of lysosomal storage disorders and other proteostatic diseases)

RN 1207673-00-4 CAPLUS
CN 1H-Pyrrolizine-1,6-diol, hexahydro-7-(methylamino)-, (1S,6R,7R,7aS)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2010:331377 CAPLUS
DOCUMENT NUMBER: 152:351235
TITLE: Compounds, including alkaloids and iminosugars, for the treatment of flaviviral infections
INVENTOR(S): Wilson, Francis Xavier; Nash, Robert James; Horne, Graeme; Storer, Richard
PATENT ASSIGNEE(S): Summit Corporation Plc., UK; Tinsley, Jonathan Mark; Roach, Alan Geoffrey
SOURCE: PCT Int. Appl., 255pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2010029313	A1	20100318	WO 2009-GB2190	20090910

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:		
GB 2008-16600	A	20080911
GB 2008-16602	A	20080911
GB 2008-19528	A	20081024
GB 2008-19533	A	20081024
GB 2009-6206	A	20090409
GB 2009-6209	A	20090409
GB 2009-8677	A	20090520
GB 2009-8697	A	20090520
GB 2009-14473	A	20090819
GB 2009-14474	A	20090819

OTHER SOURCE(S): MARPAT 152:351235
AB Described are various compds. and methods for the treatment of infections. In particular, alkaloids and imino sugars with antiviral activity are

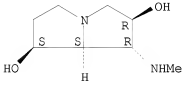
described, including those with activity against HCV and RSV. Described are various imino-sugars I, wherein, n is 1-7, provided that where n > 1 the ring may also contain at least one unsatd. C-C bond; z is 1 to (n+2); y is 1-2; R1 is H, alkyl, alkenyl, alkynyl, optionally substituted with one or more R2; O or an oxygen containing group such that the compound is an N-oxide; R2 is C(O)OR3; C(O)NR3R4; SO2NR3; OH, OR3, or formyl; R2 is OH; OR3; =O; NH2; N3; SH; SOxR3; halo; CN; NO2; NR3R4; (NR3)NR3R4; NH(NR3)NR3R4; CO2R4; (O)R3; CONR3R4; NR4C(O)R3; NR4SO2R3; P(O)(OR3)2; optionally substituted C1-15 alkyl, alkenyl, carbocyclyl, aryl, O-glycosyl; C-glycosyl; O-sulfate; O-phosphate or a group which together with the endo-cyclic-carbon forms a spiro ring; R3 is H; C1-6 alkyl, optionally substituted with one or more OH; aryl or C1-3 alkyl optionally substituted with aryl, silyl; R3 and R4 may optionally form a 4 to 8 membered ring, containing one or more O or NR3 groups; x is 0-2 and methods for the treatment of proteostatic diseases, in particular lysosomal storage disorders. Thus, imino-sugar II was prepared and used for treatment of lysosomal storage disorders and other proteostatic diseases. In particular, alkaloids and iminosugars in arabinose and/or lyxose stereochem. configuration with antiflaviviral activity are described.

IT 1207673-00-4
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compds., including alkaloids and iminosugars, for treatment of flaviviral infections, and use with other agents)

RN 1207673-00-4 CAPLUS

CN 1H-Pyrrolizine-1,6-diol, hexahydro-7-(methylamino)-, (1S,6R,7R,7aS)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:187536 CAPLUS

DOCUMENT NUMBER: 152:255177

TITLE: Compounds, including alkaloids and iminosugars, for the treatment of flaviviral infections

INVENTOR(S): Wilson, Francis Xavier; Nash, Robert James; Horne, Graeme; Storer, Richard; Tinsley, Jonathan Mark; Roach, Alan Geoffrey

PATENT ASSIGNEE(S): Summit Corporation PLC, UK

SOURCE: PCT Int. Appl., 191 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2010015815	A2	20100211	WO 2009-GB1917	20090804
WO 2010015815	A3	20100826		

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

EP 2323651 A2 20110525 EP 2009-784865 20090804

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, AL, BA, RS

PRIORITY APPLN. INFO.:

GB 2008-14216	A	20080805
GB 2008-17437	A	20080924
GB 2008-19518	A	20081024
GB 2009-6210	A	20090409
GB 2009-8672	A	20090520
WO 2009-GB1917	W	20090804

OTHER SOURCE(S): MARPAT 152:255177

AB Described are various imino-sugars I, wherein, n is 1-7, provided that where n > 1 the ring may also contain at least one unsatd. C-C bond; z is 1 to (n+2); y is 1-2; R1 is H, alkyl, alkenyl, alkynyl, optionally substituted with one or more R2; O or an oxygen containing group such that the compound is an N-oxide; R2 is C(O)OR3; C(O)NR3R4; SO2NR3; OH, OR3, or formyl; R2 is OH; OR3; =O; NH2; N3; SH; SOxR3; halo; CN; NO2; NR3R4; (NR3)NR3R4; NH(NR3)NR3R4; CO2R4; (O)R3; CONR3R4; NR4C(O)R3; NR4SO2R3; P(O)(OR3)2; optionally substituted C1-15 alkyl, alkenyl, carbocyclyl, aryl, O-glycosyl; C-glycosyl; O-sulfate; O-phosphate or a group which together with the endo-cyclic-carbon forms a spiro ring; R3 is H; C1-6 alkyl, optionally substituted with one or more OH; aryl or C1-3 alkyl optionally substituted with aryl, silyl; R3 and R4 may optionally form a 4 to 8 membered ring, containing one or more O or NR3 groups; x is 0-2 and methods for the treatment of proteostatic diseases, in particular lysosomal storage disorders. Thus, imino-sugar II was prepared and used for treatment of lysosomal storage disorders and other proteostatic diseases. In particular, alkaloids and iminosugars in arabinose and/or lyxose stereochem. configuration with antiflaviviral activity are described.

IT 1207673-00-4

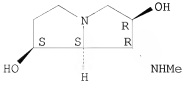
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compds., including alkaloids and iminosugars, for treatment of flaviviral infections, and use with other agents)

RN 1207673-00-4 CAPLUS

CN 1H-Pyrrolizine-1,6-diol, hexahydro-7-(methylamino)-, (1S,6R,7R,7aS)- (CA INDEX NAME)

Absolute stereochemistry.



L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2010:179046 CAPLUS
DOCUMENT NUMBER: 152:255176
TITLE: Preparation of imino-sugars and C-glycosides for treatment of lysosomal storage disorders and other proteostatic diseases
INVENTOR(S): Wilson, Francis Xavier; Nash, Robert James; Horne, Graeme; Storer, Richard; Tinsley, Jonathon Mark; Roach, Alan Geoffrey
PATENT ASSIGNEE(S): Summit Corporation PLC, UK
SOURCE: PCT Int. Appl., 204 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2010015816	A2	20100211	WO 2009-GB1918	20090804
WO 2010015816	A3	20100826		
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM,			
EP 2323652	A2	20110525	EP 2009-784866	20090804
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, AL, BA, RS				

PRIORITY APPLN. INFO.:		
GB 2008-14322	A	20080806
GB 2008-17446	A	20080924
GB 2008-17859	A	20081001
GB 2008-19523	A	20081024
GB 2008-19543	A	20081024
GB 2009-6175	A	20090409
GB 2009-6179	A	20090409
GB 2009-8661	A	20090520
GB 2009-8666	A	20090520
WO 2009-GB1918	W	20090804

OTHER SOURCE(S): CASREACT 152:255176; MARPAT 152:255176

AB Described are various imino-sugars I, wherein, n is 1-7, provided that where n > 1 the ring may also contain at least one unsatd. C-C bond; z is 1 to (n+2); y is 1-2; R1 is H, alkyl, alkenyl, alkynyl, optionally substituted with one or more R2; O or an oxygen containing group such that the compound is an N-oxide; R2 is C(O)OR3; C(O)NR3R4; SO2NR3; OH, OR3, or formyl; R2 is OH; OR3; =O; NH2; N3; SH; SOxR3; halo; CN; NO2; NR3R4; (NR3)NR3R4; NH(NR3)NR3R4; CO2R4; (O)R3; CONR3R4; NR4C(O)R3; NR4SO2R3; P(O)(OR3)2; optionally substituted C1-15 alkyl, alkenyl, carbocyclyl, aryl, O-glycosyl; C-glycosyl; O-sulfate; O-phosphate or a group which together with the endo-cyclic-carbon forms a spiro ring; R3 is H; C1-6 alkyl, optionally substituted with one or more OH; aryl or C1-3 alkyl optionally substituted with aryl, silyl; R3 and R4 may optionally form a 4 to 8 membered ring, containing one or more O or NR3 groups; x is 0-2 and

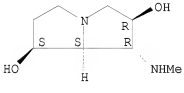
methods for the treatment of proteostatic diseases, in particular lysosomal storage disorders. Thus, imino-sugar II was prepared and used for treatment of lysosomal storage disorders and other proteostatic diseases. The compound may be a pharmacoperone of an enzyme selected from: (a) acid α-glucosidase; (b) acid-β-glucosidase; (c) glucocerebrosidase; (d) α-Galactosidase A; (e) acid-β-galactosidase; (f) β-hexosaminidase A; (g) β-hexosaminidase B; (h) acid sphingomyelinase; (i) galactocerebrosidase; (j) acid ceramidase; (k) arylsulfatase A; (l) α-L-iduronidase; (m) iduronate-2-sulfatase; (n) heparan N-sulfatase; (o) α-N-acetylglucosaminidase; (p) acetyl-CoA: α-glucosaminide N-acetyltransferase; (q) N-acetylglucosamine-6-sulfate sulfatase; (r) N-acetylgalactosamine-6-sulfate sulfatase; (s) acid-β-galactosidase; (t) arylsulfatase B; (u) β-glucuronidase; (v) acid α-mannosidase; (w) acid-β-mannosidase; (x) acid α-L-fucosidase; (y) sialidase; and (z) α-N-acetylgalactosaminidase.

IT 1207673-00-4
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of imino-sugars and C-glycosides for treatment of lysosomal storage disorders and other proteostatic diseases)

RN 1207673-00-4 CAPLUS

CN 1H-Pyrrolizine-1,6-diol, hexahydro-7-(methylamino)-, (1S,6R,7R,7aS)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:451185 CAPLUS

DOCUMENT NUMBER: 142:487686

TITLE: Antibacterial compositions comprising (alkyl)aminopyrrolizidine compounds

INVENTOR(S): Nash, Robert James; Wolferstan, Paul; Fleet, George William John; Van Ameijde, Jeroen; Horne, Graeme

PATENT ASSIGNEE(S): Molecularnature Limited, UK; M N L Pharma Limited

SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005046674	A2	20050526	WO 2004-GB4624	20041103
WO 2005046674	A3	20050714		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2003-25655 A 20031104

OTHER SOURCE(S): MARPAT 142:487686

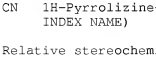
AB Antibacterial (alkyl)aminopyrrolizidine compds. for use in therapy or prophylaxis may be pharmaceutically acceptable derivs. of loline. Examples include 2,7-dihydroxy-1-methylaminopyrrolizidine, 2,7-dihydroxy-1-aminopyrrolizidine, 2-hydroxy-1-aminopyrrolizidine, 2-hydroxy-1-methylaminopyrrolizidine, 7-hydroxy-1-aminopyrrolizidine, 7-hydroxy-1-methylaminopyrrolizidine, 1α-methylamino-2β-hydroxypyrrolizidine, 1α-methylamino-7β-hydroxypyrrolizidine, 1α-amino-2β-hydroxypyrrolizidine, 1α-amino-7β-hydroxypyrrolizidine, 1α-amino-2,7β-hydroxypyrrolizidine and 1α-methylamino-2,7β-hydroxypyrrolizidine. The compds. may be used to treat infection with Staphylococcus aureus (MRSA), including C-MSRA1, C-MRSA2, C-MRSA3, C-MSRA4, Belgian MRSA, Swiss MRSA and any of the EMRSA strains. For example, meadow brown butterflies have activity against Staphylococcus aureus (MRSA) and a 50% ethanol extract of these butterflies contains the activity. Furthermore, the activity was retained by a strongly acidic cation exchange resin. The material not bound to the resin was inactive but the material displaced by 2 M ammonia solution had activity. This ammonia fraction contained various open-furan ring lolines (as determined by mass spectroscopy). Also, a semisynthetic reaction mixture derived from loline was tested for activity by incubation for 12 to 24 h at 37° at various concns. with a suspension of 1x103 c.f.u. of Staphylococcus aureus. After incubation, test samples were plated onto solid agar plates and colonies counted after incubation at 37° for 24 h. Complete bacterial killing was observed

IT 852200-80-7 852200-91-0

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antimicrobial compns. comprising (alkyl)aminopyrrolizidine compds. and loline derivs.)

RN 852200-80-7 CAPLUS

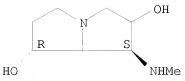
CN 1H-Pyrrolizine-1,6-diol, hexahydro-7-(methylamino)- (CA INDEX NAME)



RN 852200-91-0 CAPLUS

CN 1H-Pyrrolizine-1,6-diol, hexahydro-7-(methylamino)-, (1R,7S)-rel- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	33.96	234.40
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.35	-4.35

FILE 'REGISTRY' ENTERED AT 23:30:37 ON 03 AUG 2011
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 2 AUG 2011 HIGHEST RN 1314638-23-7
DICTIONARY FILE UPDATES: 2 AUG 2011 HIGHEST RN 1314638-23-7

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

TSCA INFORMATION NOW CURRENT THROUGH January 14, 2011.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Users\srao3\Documents\STN Express 8.4\Queries\10578053 str 2.str

L4 STRUCTURE UPLOADED

=> s l4 sss full
FULL SEARCH INITIATED 23:31:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 42612 TO ITERATE

100.0% PROCESSED 42612 ITERATIONS 58 ANSWERS
SEARCH TIME: 00.00.01

```
L5            58 SEA SSS FUL L4

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   196.86     431.26

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -4.35

FILE 'CAPLUS' ENTERED AT 23:31:14 ON 03 AUG 2011
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2011 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 3 Aug 2011  VOL 155 ISS 6
FILE LAST UPDATED: 2 Aug 2011  (20110802/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Jun 2011
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Jun 2011

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the first quarter of 2011.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l4
   REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.




SAMPLE SEARCH INITIATED 23:31:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     2159 TO ITERATE

100.0% PROCESSED     2159 ITERATIONS                          6 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED ITERATIONS:        40393 TO     45967
PROJECTED ANSWERS:               6 TO       266
```

```
L6             6 SEA SSS SAM L4


L7             4 L6

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.52     432.81

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -4.35

FILE 'CAPLUS' ENTERED AT 23:31:43 ON 03 AUG 2011
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2011 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 3 Aug 2011  VOL 155 ISS 6
FILE LAST UPDATED: 2 Aug 2011  (20110802/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Jun 2011
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Jun 2011

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the first quarter of 2011.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l5
L8             46 L5

=> s l8 and py<2006
      26345774 PY<2006
L9             36 L8 AND PY<2006

=> s l9 and py<2005
      25162844 PY<2005
L10            34 L9 AND PY<2005

=> s l10 and py<2003
      23001515 PY<2003
L11            33 L10 AND PY<2003
```

=> d l11 1-33 ibib ab hitstr

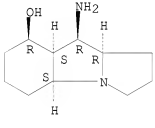
L11 ANSWER 1 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2002:537298 CAPLUS
DOCUMENT NUMBER: 137:384712
TITLE: A valuable approach to enantiopure partially saturated pyrrolo- and indolo[1,2-a]indoles by intramolecular nitrone cycloadditions to the cyclohexene ring
AUTHOR(S): Beccalli, Egle M.; Broggini, Gianluigi; Farina, Alessandra; Malpezzi, Luciana; Terraneo, Alberto; Zecchi, Gaetano
CORPORATE SOURCE: Istituto di Chimica Organica della Facolta di Farmacia dell'Universita di Milano, Milan, 20133, Italy
SOURCE: European Journal of Organic Chemistry (2002), (13), 2080-2086
CODEN: EJOCFK; ISSN: 1434-193X
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:384712

AB Enantiopure representatives of the title heterocyclic systems, e.g. I, which are of interest in alkaloid chemical, are accessible by a procedure based upon intramol. cycloaddns. of nitrones derived from N-(cyclohex-2-enyl)-substituted pyrrole-2- and indole-2-carbaldehyde, followed by reductive manipulation of the cycloadducts.

IT 475985-01-4P 475985-13-8P 475985-16-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(approach to enantiopure partially saturated pyrrolo- and indolo[1,2-a]indoles by intramol. nitrone cycloaddns. to the cyclohexene ring)

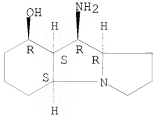
RN 475985-01-4 CAPLUS
CN 1H-Pyrrolo[1,2-a]indol-8-ol, 9-aminodecahydro-, (4aR,8S,8aR,9S,9aS)-rel- (CA INDEX NAME)

Relative stereochemistry.



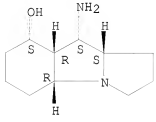
RN 475985-13-8 CAPLUS
CN 1H-Pyrrolo[1,2-a]indol-8-ol, 9-aminodecahydro-, (4aS,8R,8aS,9R,9aR)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 475985-16-1 CAPLUS
CN 1H-Pyrrolo[1,2-a]indol-8-ol, 9-aminodecahydro-, (4aR,8S,8aR,9S,9aS)- (CA INDEX NAME)

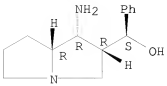
Absolute stereochemistry. Rotation (-).



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

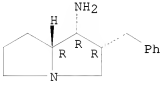
L11 ANSWER 2 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2001:694087 CAPLUS
DOCUMENT NUMBER: 136:102311
TITLE: Regiochemical aspects of intramolecular cycloadditions of nitrones derived from N-(2-alkenyl)-2-pyrrolecarbaldehydes. Competitive entries to pyrrolizidine and indolizidine derivatives
AUTHOR(S): Broggini, G.; La Rosa, C.; Pilati, T.; Terraneo, A.; Zecchi, G.
CORPORATE SOURCE: Dipartimento di Scienze Chimiche, Fisiche e Matematiche, Universita dell'Insubria, Como, 22100, Italy
SOURCE: Tetrahedron (2001), 57(39), 8323-8332
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:102311
AB Intramol. cycloaddns. of unsatd. nitrones derived from a series of N-(2-alkenyl)-2-pyrrolecarbaldehydes I (R = H, Bu, R1 = H, Me, R2 = H, Pr, Ph, Me) have been systematically studied. A pronounced substituent effect has been observed as far as the competitive formation of fused- and bridged-ring regioisomers, e.g. II, are concerned. Further elaboration of the two kinds of cycloadducts, via hydrogenation, has given pyrrolizidine and indolizidine derivs., resp., e.g. III. The absolute configuration was assigned by NMR and x-ray anal.
IT 389621-09-4P 389621-10-7P 389621-32-3P
389621-33-4P 389621-34-5P 389621-35-6P
389621-36-7P 389621-37-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(regiochem. in cycloaddn. of alkenylpyrrolecarbaldehyde nitrones to fused and bridged-ring isoxazoles and preparation of pyrrolizidines and indolizidines)
RN 389621-09-4 CAPLUS
CN 1H-Pyrrolizine-2-methanol, 1-aminohexahydro-α-phenyl-, (αS,1R,2R,7aR)- (CA INDEX NAME)

Absolute stereochemistry.



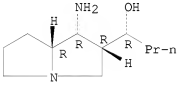
RN 389621-10-7 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-2-(phenylmethyl)-, (1R,2R,7aR)- (CA INDEX NAME)

Absolute stereochemistry.



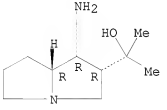
RN 389621-32-3 CAPLUS
CN 1H-Pyrrolizine-2-methanol, 1-aminohexahydro-α-propyl-, (αR,1R,2R,7aR)-rel- (CA INDEX NAME)

Relative stereochemistry.



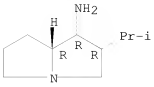
RN 389621-33-4 CAPLUS
CN 1H-Pyrrolizine-2-methanol, 1-aminohexahydro-α,α-dimethyl-, (1R,2R,7aR)-rel- (CA INDEX NAME)

Relative stereochemistry.



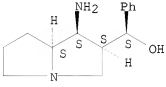
RN 389621-34-5 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-2-(1-methylethyl)-, (1R,2R,7aR)- (CA INDEX NAME)

Absolute stereochemistry.



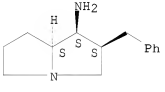
RN 389621-35-6 CAPLUS
CN 1H-Pyrrolizine-2-methanol, 1-aminohexahydro-α-phenyl-, (αS,1S,2S,7aS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



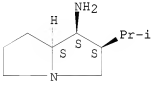
RN 389621-36-7 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-2-(phenylmethyl)-, (1S,2S,7aS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 389621-37-8 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-2-(1-methylethyl)-, (1S,2S,7aS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

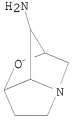
L11 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2001:541397 CAPLUS
DOCUMENT NUMBER: 135:344623
TITLE: Asymmetric synthesis of (+)-loline, a pyrrolizidine alkaloid from rye grass and tall fescue
AUTHOR(S): Blakemore, Paul R.; Kim, Sung-Kee; Schulze, Volker K.;

White, James D.; Yokochi, Alexandre F. T.
CORPORATE SOURCE: Department of Chemistry, Oregon State University, Corvallis, OR, 97331-4003, USA
SOURCE: Journal of the Chemical Society, Perkin Transactions 1 (2001), (15), 1831-1847
CODEN: JCSPCE; ISSN: 1472-7781
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:344623

AB (+)-Loline (I) was synthesized via a pathway that employed intramol. [4 + 2] cycloaddn. of an acylnitrosodiene, (S,E)-H2C:CHCH:CHCH(OR1)CH2CON:O (R1 = SiMe2CMe3, CH2C6H4OMe-4), as a key step. The acylnitrosodienes, which were used in situ, were obtained by oxidation of the corresponding hydroxamic acids, (S,E)-H2C:CHCH:CHCH(OR2)CH2CONHOH (R2 = SiMe2CMe3, CH2C6H4OMe-4), and these were prepared from either glucose via aldehyde II or more directly from (S)-malic acid. The endo dihydrooxazines III (R3 = SiMe2CMe3, CH2C6H4OMe-4), obtained in a mixture with their exo stereoisomer, were transformed by reductive N-O bond cleavage and reannulation into pyrrolizines IV (R4 = SiMe2CMe3, CH2C6H4OMe-4). The latter was subjected to Sharpless aminohydroxylation in the presence of (DHQD)2PHAL to give V (R5 = R6 = H) along with its regioisomer. N-Methylation of tosyl amide V (R5 = R6 = H), followed by mesylation of alc. V (R5 = H; R6 = Me) and reduction of the γ-lactam V (R5 = SO2Me; R6 = Me) with borane, afforded pyrrolizidine VI (R7 = CH2C6H4OMe-4). Cleavage of the p-methoxybenzyl ether and subsequent thermal treatment of VI (R7 = H) resulted in intramol. etherification to yield N-tosylloline (VII). Final reductive cleavage of the N-tosyl residue produced (+)-loline (I), characterized as its dihydrochloride.

IT 4839-19-4P, Norloline
RL: PNU (Preparation, unclassified); PREP (Preparation)
(asym. synthesis of (+)-loline from malic acid or glucose via an intramol. [4 + 2] cycloaddn. of an acylnitrosodiene)

RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)
REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2000:232205 CAPLUS
DOCUMENT NUMBER: 133:17672
TITLE: Synthesis of the natural 1-amidopyrrolizidines absouline and laburnamine, and pyrrolidinoimidazole derivatives and analogs
AUTHOR(S): Christine, Caline; Ikhiri, Khalid; Ahond, Alain; Mourabit, Ali Al; Poupat, Christiane; Potier, Pierre

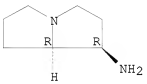
CORPORATE SOURCE: Institut de Chimie des Substances Naturelles du CNRS, Gif-sur-Yvette, 91198, Fr.
SOURCE: Tetrahedron (2000), 56(13), 1837-1850
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: French
OTHER SOURCE(S): CASREACT 133:17672

AB Natural 1-amidopyrrolizidines, absouline and laburnamine, were synthesized via stable pyrrolizidin-1-one hydrobromide. Amides, ester derivs. and aminopyrrolidinoimidazole analogs, e.g.I, were also prepared and their cytotoxic and antiviral biol. activities tested.

IT 141197-03-7P 145511-58-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of natural 1-amidopyrrolizidines absouline and laburnamine, and pyrrolidinoimidazolic derivs. and analogs)

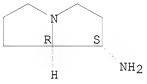
RN 141197-03-7 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-, (1R,7aR)-rel- (CA INDEX NAME)

Relative stereochemistry.



RN 145511-58-6 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-, (1R,7aS)-rel- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1996:521770 CAPLUS
DOCUMENT NUMBER: 125:248186
ORIGINAL REFERENCE NO.: 125:46413a,46416a
TITLE: A concise route to pyrrolizidine alkaloids bearing the 1,2-amino alcohol functionality
AUTHOR(S): Palomo, Claudio; Aizpurua, Jesus M.; Cuevas, Carmen; Roman, Pascual; Luque, Antonio; Martinez-Ripoll, Martin
CORPORATE SOURCE: Facultad de Quimica, Universidad del Pais Vasco, San Sebastian, E-20080, Spain
SOURCE: Anales de Quimica International Edition (1996), 92(3), 134-135

CODEN: AQIEFZ
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 125:248186

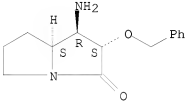
AB 1-Amino-2-hydroxy-pyrrolizidine and 1-amino-pyrrolizidine alkaloid precursors were prepared by a highly diastereoselective [2+2] cycloaddn. of alkoxyketenes to N-BOC-prolinal imines as the key reaction. Imines I (R = 4-MeOC6H4, PhCH2) were cyclized with R1OCH2COCl (R1 = Me, PhCH2) to form β-lactams (II). β-Lactam II (R = 4-MeOC6H4, R1 = PhCH2) was further cyclized and transformed to pyrrolizidine (III; R3 = PhCH2NH, R4 = PhCH2O, X = H2) via a series of steps. β-Lactam II (R = R1 = PhCH2) underwent deoxygenation and intramol. rearrangement to form pyrrolizidine III (R3 = PhCH2NH, R4 = H, X = O).

IT 181827-73-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthetic route to 1-amino-2-hydroxypyrrolizidine alkaloids)

RN 181827-73-6 CAPLUS

CN 3H-Pyrrolizin-3-one, 1-aminohexahydro-2-(phenylmethoxy)-, [1R-(1α,2β,7aβ)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

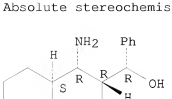
L11 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1996:355004 CAPLUS
DOCUMENT NUMBER: 125:167721
ORIGINAL REFERENCE NO.: 125:31425a,31428a
TITLE: An asymmetric approach to pyrrolidinone and pyrrolizidinone systems by intramolecular oxime-olefin cycloaddition
AUTHOR(S): Chiacchio, Ugo; Corsaro, Antonino; Pistara, Venerando; Rescifina, Antonio; Romeo, Giovanni; Romeo, Roberto
CORPORATE SOURCE: Dip. Sci. Chim. Univ., Catania, 95125, Italy
SOURCE: Tetrahedron (1996), 52(23), 7875-7884
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 125:167721

AB Homochiral functionalized pyrrolidinone and pyrrolizidinone systems I [R1 = R2 = Me; R1 = Ch2Ph, R2 = Me; R1R2 = (CH2)3] and II (R = Me, Et, Ph) have been achieved by stereoselective intramol. oxime-olefin cycloaddn. starting from homochiral amino acids, and by subsequent reduction of the obtained fused isoxazolidines III and IV, resp.

IT 180036-57-1P 180036-66-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(asym. synthesis of pyrrolidinones and pyrrolizidinones via intramol. oxime-olefin cycloaddn.)

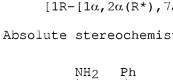
RN 180036-57-1 CAPLUS
CN 3H-Pyrrolizin-3-one, 1-aminohexahydro-2-(hydroxyphenylmethyl)-, [1R-[1α,2α(R*),7aα]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



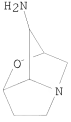
RN 180036-66-2 CAPLUS
CN 1H-Pyrrolizine-2-methanol, 1-aminohexahydro-α-phenyl-, [1R-[1α,2α(R*),7aα]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



OS.CITING REF COUNT: 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (37 CITINGS)

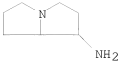
L11 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1996:112166 CAPLUS
DOCUMENT NUMBER: 124:170620
ORIGINAL REFERENCE NO.: 124:31551a,31554a
TITLE: Alkaloids of Adenocarpus complicatus (L.) Gay
AUTHOR(S): Tosun, Fatma; Greinwald, Roland; Aydinlioglu, Ash
CORPORATE SOURCE: Fac. Pharmacy, Gazi Univ., Ankara, 06330, Turk.
SOURCE: Hacettepe Universitesi Eczacilik Fakultesi Dergisi (1995), 15(1), 1-4
CODEN: HUEDEE; ISSN: 1300-0608
PUBLISHER: Hacettepe Universitesi Eczacilik Fakultesi Dekanligi
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Alkaloid exts. obtained from different organs of A. complicatus were analyzed by capillary GC. Pyrrolizidine and bipiperidyl alkaloids were identified. No quinolizidine alkaloids and pyrrolizidine N-oxides could be detected in the exts.
IT 4839-19-4P, Norloline
RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(alkaloids of Adenocarpus complicatus)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)- (9CI) (CA INDEX NAME)



L11 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1995:928200 CAPLUS
DOCUMENT NUMBER: 124:88139
ORIGINAL REFERENCE NO.: 124:16570h,16571a
TITLE: Hydroxy and amino functional pyrrolizidine catalyst compositions for the production of polyurethanes.
INVENTOR(S): Savoca, Ann Coates Lescher; Wressell, Amy Lynne; Listemann, Mark Leo; Carr, Richard Van Court; Mercando, Lisa Ann; Lassila, Kevin Rodney; Minnich, Kristen Elaine
PATENT ASSIGNEE(S): Air Products and Chemicals, Inc., USA
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 668303	A1	19950823	EP 1995-102351	19950220 <--
EP 668303	B1	20000823		
R: BE, DE, FR, GB, IT, NL				
US 5512603	A	19960430	US 1994-199396	19940222 <--
CA 2142584	A1	19950823	CA 1995-2142584	19950215 <--
BR 9500675	A	19951031	BR 1995-675	19950217 <--
KR 150871	B1	19981015	KR 1995-3206	19950220 <--
JP 07258365	A	19951009	JP 1995-31961	19950221 <--
JP 2974273	B2	19991110		
CN 1119194	A	19960327	CN 1995-102159	19950221 <--
CN 1048736	C	20000126		

PRIORITY APPLN. INFO.: US 1994-199396 A 19940222
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 124:88139
AB Polyurethane foams are prepared by reacting an organic polyisocyanate and a polyol in the presence of a blowing agent, cell stabilizer and a catalyst composition consisting essentially of a pyrrolizidine (I), where R1 and R2 independently = H, OH, or NR4R5; R3 = H, a C1-C12 alkyl, C5-C6 cycloalkyl, C6-C10 aryl, or C7-C11 arylalkyl group; and R4 and R5 independently = H, a C1-12 alkyl group, C5-C10 cycloalkyl, C6-C10 aryl, or C7-C11 arylalkyl group, provided that at least R1 or R2 is not H. Catalysts containing HOCH2 or iso-PrNHCH2 groups were about twice as active as triethylenediamine in the polymerization of a monomer mixture containing E 648 polyol, E 519 polyol, and TDI.
IT 170442-12-3
RL: CAT (Catalyst use); USES (Uses)
(hydroxy and amino functional pyrrolizidine catalyst compns. for production of polyurethanes)
RN 170442-12-3 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 9 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1995:759110 CAPLUS
DOCUMENT NUMBER: 124:8812
ORIGINAL REFERENCE NO.: 124:1865a,1868a
TITLE: Azabicyclo imidazopyridines as serotonergic 5-HT3 antagonists
INVENTOR(S): Becker, Daniel P.; Flynn, Daniel L.; Moormann, Alan E.; Nosal, Roger; Villamil, Clara I.
PATENT ASSIGNEE(S): G. D. Searle and Co., USA
SOURCE: U.S., 19 pp. Cont.-in-part of U.S. 5,260,303. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 5434161	A	19950718	US 1992-973126		19921106	<--
US 5260303	A	19931109	US 1991-666113		19910307	<--
CA 2082414	A1	19920908	CA 1992-2082414		19920304	<--
US 5604239	A	19970218	US 1995-424732		19950418	<--
US 5591749	A	19970107	US 1995-424934		19950419	<--
PRIORITY APPLN. INFO.:			US 1991-666113	A2	19910307	
			US 1992-973126	A3	19921106	

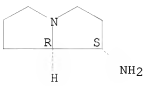
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 124:8812

AB The imidazopyridines compds. of the present invention [I, the stereoisomers and pharmaceutically acceptable salts thereof, wherein R1 is H or C1-6 alkyl and R2 is H or halogen; Y represents NH or O; and wherein k is 1, l is 1, j is 0 to 4 and one of R'3 and R'4 is H, C1-6 alkyl, Ph or phenyl-C1-3 alkyl, which Ph moieties may be optionally substituted by C1-6 alkyl, C1-6 alkoxy, CF3 or halogen and the other of R'3 and R'4 is H or C1-6 alkyl] are serotonergic 5-HT3 antagonists. As such they are useful for the treatment of humans and animals wherein antagonism of 5-HT3 receptors is beneficial. Therapy is indicated for, but not limited to, the treatment of anxiety, psychoses, depression (especially depression accompanied by anxiety), cognitive disorders, substance abuse dependence and withdrawal, gastrointestinal motility disturbances (including esophageal reflux, dyspepsia, gastric stasis, irritable bowel syndrome), emesis caused by chemotherapeutic agents, and visceral pain. Addnl., the compds. of the present invention may find utility as enhancers of nasal absorption of bioactive compds. Thus, e.g., amidation of 6-chloroimidazo[1,2-a]pyridine-8-carboxylic acid, monohydrochloride (preparation given) with endo-4-amino-1-azabicyclo[3.3.1]nonane afforded title compound II.2HCl which exhibited 87% inhibition of Bezold Jarisch reflex in mice at 10 mg/kg i.p.

IT 145511-58-6
RL: RCT (Reactant); RACT (Reactant or reagent)

(azabicyclo imidazopyridines as serotonergic 5-HT3 antagonists)
RN 145511-58-6 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-, (1R,7aS)-rel- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

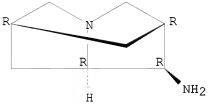
L11 ANSWER 10 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1995:274875 CAPLUS
DOCUMENT NUMBER: 122:56041
ORIGINAL REFERENCE NO.: 122:10863a,10866a
TITLE: Preparation of benzimidazolecarboxamide compounds as serotoninergic agents
INVENTOR(S): Flynn, Daniel Lee; Moormann, Alan Edward; Becker, Daniel Paul; Dappen, Michael Scott; Nosal, Roger; Shone, Robert L.; Villamil, Clara I.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: PCT Int. Appl., 136 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9400454	A1	19940106	WO 1993-US5862	19930623 <--
W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5280028	A	19940118	US 1992-903835	19920624 <--
AU 9345407	A	19940124	AU 1993-45407	19930623 <--
US 5534521	A	19960709	US 1994-325303	19941108 <--
US 5521193	A	19960528	US 1995-445057	19950519 <--
PRIORITY APPLN. INFO.:			US 1992-903835	A2 19920624
			WO 1993-US5862	A 19930623
			US 1994-325303	A3 19941108

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 122:56041
AB This invention relates to compds. useful in treating HT4 and/or HT3-mediated conditions of formula I (R1, R2 = H, alkoxy, halo, amino, etc.; R3 = H, alkyl and cycloalkyl; X = NH or O; Z = heterocyclic group). I are disclosed for treating serotonin-mediated conditions using compns. which act as 5-HT4, agonist or antagonists and/or 5-HT3 antagonists. An example compound, N-[(hexahydro-2β,6β-methano-7aα-pyrrolizin-1α-yl)methyl]benzimidazolecarboxamide II was prepared The activity of II as 5-HT4 agonist was tested in vitro on rat esophagi (EC50 = 219 nM;

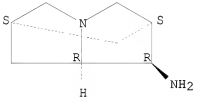
serotonin EC50 = 9 nM).
IT 159996-23-3P 160080-12-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for oxobenzimidazolecarboxamide serotoninergic)
RN 159996-23-3 CAPLUS
CN 2,6-Methano-1H-pyrrolizin-1-amine, hexahydro-, [1R-(1α,2α,6α,7aβ)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 160080-12-6 CAPLUS
CN 2,6-Methano-1H-pyrrolizin-1-amine, hexahydro-, (1R,2S,6S,7aR)-rel- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

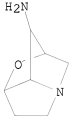
L11 ANSWER 11 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1993:666695 CAPLUS
DOCUMENT NUMBER: 119:266695
ORIGINAL REFERENCE NO.: 119:47621a,47624a
TITLE: Analyses of selected endophyte-infected grasses for the presence of loline-type and ergot-type alkaloids
AUTHOR(S): TePaske, Mark R.; Powell, Richard G.; Clement, Stephen L.
CORPORATE SOURCE: Agric. Res. Serv., Natl. Cent. Agric. Util. Res., Peoria, IL, 61604, USA
SOURCE: Journal of Agricultural and Food Chemistry (1993), 41(12), 2299-303
CODEN: JAFCAU; ISSN: 0021-8561
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Selected endophyte-free and endophyte-infected grasses from the genera Festuca, Lolium, Hordeum, Stipa, and Poa were analyzed for the presence of loline- and ergot-type alkaloids. Loline alkaloids were analyzed by capillary GC, and ergot-type alkaloids were analyzed by reversed-phase HPLC. None of the endophyte-free samples contained detectable levels of either of these alkaloid types. Endophyte-infected grass samples gave

widely variable alkaloid concns. N-Formylloline was the predominant loline alkaloid, and ergovaline was usually the predominant ergot-type alkaloid in these samples.

IT 4839-19-4, Norloline
RL: BIOL (Biological study)
(in Acremonium-infected grasses)

RN 4839-19-4 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS)

L11 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1993:409018 CAPLUS

DOCUMENT NUMBER: 119:9018

ORIGINAL REFERENCE NO.: 119:1857a,1860a

TITLE: Synthetic methods. 40. A synthesis of (-)-supinidine and its regioisomer by intramolecular oxime olefin cycloaddition

AUTHOR(S): Hassner, Alfred; Singh, Suddham; Sharma, Raman; Maurya, Rakesh

CORPORATE SOURCE: Dep. Chem., Bar-Ilan Univ., Ramat-Gan, 52900, Israel

SOURCE: Tetrahedron (1993), 49(11), 2317-24
CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 119:9018

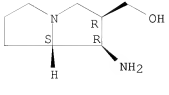
AB A synthesis of (-)-supinidine I and its regioisomer from L-proline is described. The key step is a thermal intramol. oxime-olefin cycloaddn. of pyrrolidine II; dimerization products resulting from intramol. nitrone formation were also isolated.

IT 147919-18-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and diazotization-elimination reaction of)

RN 147919-18-4 CAPLUS

CN 1H-Pyrrolizine-2-methanol, 1-aminohexahydro-, [1R-(1α,2α,7aα)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



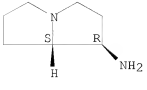
OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L11 ANSWER 13 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1993:254908 CAPLUS
DOCUMENT NUMBER: 118:254908
ORIGINAL REFERENCE NO.: 118:44301a,44304a
TITLE: Preparation of imidazopyridines as 5-HT3 antagonists
INVENTOR(S): Becker, Daniel P.; Flynn, Daniel L.; Moormann, Alan Edward; Nosal, Roger; Villamil, Clara I.
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9215593	A1	19920917	WO 1992-US1524	19920304 <--
W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG				
US 5260303	A	19931109	US 1991-666113	19910307 <--
CA 2082414	A1	19920908	CA 1992-2082414	19920304 <--
AU 9215728	A	19921006	AU 1992-15728	19920304 <--
EP 530353	A1	19930310	EP 1992-908804	19920304 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL				
JP 06500124	T	19940106	JP 1992-508210	19920304 <--
EP 504679	A1	19920923	EP 1992-103862	19920306 <--
R: PT				

PRIORITY APPLN. INFO.: US 1991-666113 A2 19910307
WO 1992-US1524 A 19920304
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 118:254908
AB Title compds. ArCOYZ [I; Ar = Q1, etc.; R1 = H, C1-6 alkyl; R2 = H, halo; Y = NH, O; Z = Q2, etc.; with provisos] were prepared as 5-HT3 antagonists. Thus, imidazo[1,2-a]pyridine-8-carboxylic acid.HCl (preparation given) in CHC13/DMF was treated with SOC12, then 3-aminoquinuclidine.2HCl and Et3N to give title compound II.2HCl. The latter had IC50 of 70 nM against 5-HT3 binding in NG108-15 cells and gave 100% inhibition at 10 mg/kg i.p. in mice in a Bezold-Jarisch reflex assay.
IT 66393-06-4 145511-58-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of 5-HT3 antagonists)
RN 66393-06-4 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-, (1R,7aS)- (CA INDEX NAME)

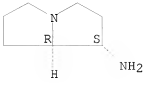
Absolute stereochemistry. Rotation (-).



RN 145511-58-6 CAPLUS

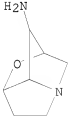
CN 1H-Pyrrolizin-1-amine, hexahydro-, (1R,7aS)-rel- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1993:95700 CAPLUS
DOCUMENT NUMBER: 118:95700
ORIGINAL REFERENCE NO.: 118:16625a,16628a
TITLE: Quantitative analyses of bovine urine and blood plasma for loline alkaloids
AUTHOR(S): TePaske, Mark R.; Powell, Richard G.; Petroski, Richard J.; Samford, Melanie D.; Paterson, John A.
CORPORATE SOURCE: Agric. Res. Serv., Natl. Cent. Agric. Util. Res., Peoria, IL, 61604, USA
SOURCE: Journal of Agricultural and Food Chemistry (1993), 41(2), 231-4
CODEN: JAFCAU; ISSN: 0021-8561
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Capillary gas chromatog. methods for the routine anal. of the loline alkaloids in bovine blood plasma and urine were developed. Urine samples diluted with MeOH were suitable for direct GC anal. Plasma samples, following protein precipitation, were also suitable for direct GC anal. N-Methylloline was used as an internal standard for these analyses. Peak identities were verified by mass spectrometry and comparison to known stds. The methods should prove to be useful in toxicol. studies concerning the role of loline alkaloids in fescue toxicosis.
IT 4839-19-4
RL: ANT (Analyte); ANST (Analytical study)
(anal. of, in feed, by capillary gas chromatog.)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

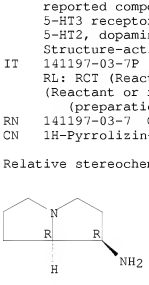
L11 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1992:247899 CAPLUS
DOCUMENT NUMBER: 116:247899
ORIGINAL REFERENCE NO.: 116:41799a,41802a
TITLE: SC-53116: the first selective agonist at the newly identified serotonin 5-HT4 receptor subtype
AUTHOR(S): Flynn, Daniel L.; Zabrowski, Daniel L.; Becker, Daniel P.; Nosal, Roger; Villamil, Clara I.; Gullikson, Gary W.; Moummi, Chafiq; Yang, Dai C.
CORPORATE SOURCE: Gastrointest. Dis. Res. Dep., Searle Res. and Dev., Skokie, IL, 60077, USA
SOURCE: Journal of Medicinal Chemistry (1992), 35(8), 1486-9
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 116:247899

AB Novel substituted pyrrolizidines are disclosed and their interactions with the newly identified serotonin 5-HT4 receptor described. SC-53116 (I) exhibits potent activity as an agonist at the 5-HT4 receptor (ED50 = 23 nM) similar to the potency of serotonin (ED50 = 16 nM). Unlike previously reported compds., Iis only weakly active as an antagonist at serotonin 5-HT3 receptors (Ki = 152 nM). Moreover, I does not interact at 5-HT1, 5-HT2, dopaminergic, or adrenergic receptors at concns. up to 10,000 nM. Structure-activity relations in this series are discussed.

IT 141197-03-7P 145511-58-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with substituted benzoic acids)

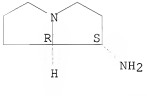
RN 141197-03-7 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-, (1R,7aR)-rel- (CA INDEX NAME)

Relative stereochemistry.



RN 145511-58-6 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-, (1R,7aS)-rel- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 46 THERE ARE 46 CAPLUS RECORDS THAT CITE THIS RECORD (46 CITINGS)

L11 ANSWER 16 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1991:487005 CAPLUS
DOCUMENT NUMBER: 115:87005
ORIGINAL REFERENCE NO.: 115:14839a,14842a

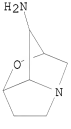
TITLE: Detection and identification of loline and its analogs in horse urine
AUTHOR(S): Takeda, Akira; Suzuki, Etsuko; Kamei, Katsutoshi; Nakata, Hisao
CORPORATE SOURCE: Lab. Racing Chem., Tokyo, 158, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1991), 39(4), 964-8
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Several kinds of loline-type alkaloids, norloline, loline, N-acetylnorloline, N-acetylloline, N-formylnorloline, N-formylloline, and N-methylloline, were detected in the urine of race-horses. Furthermore, a new compound of the alkaloids, N-senecioylnorloline, was also found and identified. These compds. were mainly identified by means of gas chromatog.-mass spectrometry and gas chromatog.-fourier transform-IR spectrometry. A certain plant of the Gramineae containing four kinds of loline-type alkaloids was found in a bale of hay used for the horse forage. The taxonomic feature of the plant was different from known plants containing loline-type alkaloids. The common fragmentation of loline-type alkaloids under electron ionization is briefly discussed.

IT 4839-19-4, Norloline
RL: BIOL (Biological study)
(in horse urine)

RN 4839-19-4 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L11 ANSWER 17 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1990:52182 CAPLUS
DOCUMENT NUMBER: 112:52182
ORIGINAL REFERENCE NO.: 112:8897a,8900a
TITLE: Isolation, semi-synthesis, and NMR spectral studies of loline alkaloids
AUTHOR(S): Petroski, R. J.; Yates, S. G.; Weisleder, D.; Powell, R. G.
CORPORATE SOURCE: North. Reg. Res. Cent., Agric. Res. Serv., Peoria, IL, 61604, USA
SOURCE: Journal of Natural Products (1989), 52(4), 810-17
CODEN: JNPRDF; ISSN: 0163-3864
DOCUMENT TYPE: Journal
LANGUAGE: English

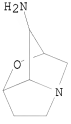
AB Loline, a saturated pyrrolizidine-type alkaloid, was isolated from tall fescue (Festuca arundinacea) seed infected with the endophytic fungus Acremonium coenophialum. Procedures are described for the efficient conversion of loline to derivs. also known to occur naturally: norloline,

N-formylnorloline, N-acetylnorloline, N-methylloline, N-formylloline, and N-acetylloline. The loline alkaloids are of interest as they are suspected contributors to several disease syndromes in cattle that consume endophyte-infected tall fescue. The structure of hydroxychlorloline, a reaction product of loline with HCl, was determined, and complete 1H- and 13C-NMR assignments for all the lolines are reported.

IT 4839-19-4P, Norloline
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, from loline)

RN 4839-19-4 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

L11 ANSWER 18 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 1990:50067 CAPLUS

DOCUMENT NUMBER: 112:50067

ORIGINAL REFERENCE NO.: 112:8493a,8496a

TITLE: Analysis of loline alkaloids in endophyte-infected tall fescue by capillary gas chromatography

AUTHOR(S): Yates, Shelly G.; Petroski, Richard J.; Powell, Richard G.

CORPORATE SOURCE: North. Reg. Res. Cent., ARS, Peoria, IL, 61604, USA

SOURCE: Journal of Agricultural and Food Chemistry (1990), 38(1), 182-5
CODEN: JAFCAU; ISSN: 0021-8561

DOCUMENT TYPE: Journal

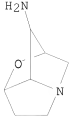
LANGUAGE: English

AB A capillary GC method for routine anal. of loline alkaloids (I, R1 = H, Me; R2 = H, Me, Ac, CHO) in tall fescue (Festuca arundinacea) seed and forage was developed. Filtered solvent exts. of seed, in CH2Cl2/MeOH/NH4OH (75:25:0.5), with phenylmorpholine as an internal standard were normally suitable for direct GC anal.; however, forage exts. required addnl. cleanup by ion exchange to remove interfering substances. Peak identities were confirmed by mass spectrometry and comparison to known stds. The method should be useful in studies concerning the relationships between I concentration in grasses, insect resistance, and performance problems in cattle.

IT 4839-19-4, Norloline
RL: PROC (Process)
(GC of)

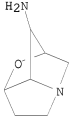
RN 4839-19-4 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)

L11 ANSWER 19 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1986:515258 CAPLUS
DOCUMENT NUMBER: 105:115258
ORIGINAL REFERENCE NO.: 105:18671a,18674a
TITLE: Synthesis of the lolium alkaloids
AUTHOR(S): Tufariello, Joseph J.; Meckler, Harold; Winzenberg, Kevin
CORPORATE SOURCE: Dep. Chem., State Univ. New York, Buffalo, NY, 14214, USA
SOURCE: Journal of Organic Chemistry (1986), 51(18), 3556-7
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 105:115258
AB Loline (I, R = NHMe) and norloline (I, R = NH2) were synthesized using a nitrone-based approach leading to pyrrolizidine II. II could be epimerized and subsequently converted into chloropyrrolizine III, which upon basic hydrolysis proceeds to the desired skeleton I (R = CH2OH). The methodol. of the Curtius rearrangement was then used to afford both loline and norloline.
IT 103531-60-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 103531-60-8 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2α,3α,3aβ,4α,6aβ)- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

L11 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1978:406461 CAPLUS
DOCUMENT NUMBER: 89:6461
ORIGINAL REFERENCE NO.: 89:1111a,1114a
TITLE: Genus Crotalaria: part XXXI. Preparation of pharmacodynamic compounds based on 1-methylenepyrrolizidine

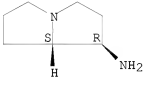
AUTHOR(S): Suri, K. A.; Suri, O. P.; Sawhney, R. S.; Gupta, O. P.; Atal, C. K.
CORPORATE SOURCE: Reg. Res. Lab., Jammu-Tawi, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1977), 15B(10), 972-3
CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The methylenepyrrolizidine I (Z = CH2) underwent ozonolysis to give I (Z = O), the picrate of which underwent successive oximaton, neutralization by ion exchange chromatog., and the reduction to give a cis-trans mixture of I (Z = H2N, H) (II). Condensation of II with BzOH in the presence of dicyclohexylcarbodiimide gave I (Z = BzNH, H). I (Z = HON) possessed cardiotonic activity in the guinea pig at 500 μg-2 mg. The quaternary ammonium salts from reaction of 4-PhC6H4COCH2Br with heliotridane and I (Z = CH2) possessed spasmolytic activity comparable to that of papaverine.

IT 66393-06-4P 66393-07-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and condensation reaction with benzoic acid)

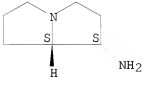
RN 66393-06-4 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-, (1R,7aS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 66393-07-5 CAPLUS
CN 1H-Pyrrolizin-1-amine, hexahydro-, (1S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 21 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1976:459556 CAPLUS
DOCUMENT NUMBER: 85:59556
ORIGINAL REFERENCE NO.: 85:9611a,9614a
TITLE: Study of alkaloids from Lolium cuneatum
AUTHOR(S): Batirov, E. Kh.; Khamidkhodzhaev, S. A.; Malikov, V. M.; Yunusov, S. Yu.
CORPORATE SOURCE: Inst. Khim. Rastit. Veshchestv, Tashkent, USSR
SOURCE: Khimiya Prirodnykh Soedinenii (1976), (1), 60-3
CODEN: KPSUAR; ISSN: 0023-1150
DOCUMENT TYPE: Journal

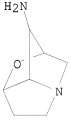
LANGUAGE: Russian

AB Two substances (N-methylloline and N-formylloline) in addition to the known alkaloids were isolated from L. cuneatum. Seeds were collected in the Tadzhikitskaya SSR during 1972 and introduced into the Tashkent district. From the Tadzhikitskaya collection, the CHCl3 extract gave a basic mixture (A) in an amount of 0.23%. From the 2nd Tashkent collection, the seeds gave 0.24% total alkaloids (B). Loline, norloline, lolinine, and bases I and II were separated from the total alkaloids of A. I was identified as N-methylloline (C9H16N2O); base II was identified as N-acetylnorloline. B yielded loline, lolinine, N-acetylnorloline, a base III, and N-formylloline.

IT 4839-19-4
RL: BIOL (Biological study)
(from Lolium cuneatum)

RN 4839-19-4 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



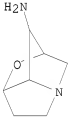
IT 20321-58-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 20321-58-8 CAPLUS

CN Carbonic acid, compd. with [2R-(2α,3α,3aβ,4α,6aβ)]-hexahydro-2,4-methano-4H-furo[3,2-b]pyrrol-3-amine (1:1) (9CI) (CA INDEX NAME)

CM 1

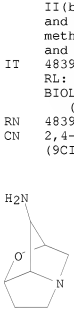
CRN 4839-19-4
CMF C7 H12 N2 O



CM 2

CRN 463-79-6
CMF C H2 O3

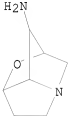
L11 ANSWER 22 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1974:460849 CAPLUS
DOCUMENT NUMBER: 81:60849
ORIGINAL REFERENCE NO.: 81:9691a,9694a
TITLE: Alkaloids of Papilonaceae. LV. Identification on N-depropionyldecorticasine and higher amides of decorticasine in Adenocarpus decorticans
AUTHOR(S): Landa-Velon, A.; Ribas-Marques, I.
CORPORATE SOURCE: Fac. Cienc., Patronato "Juan de la Cierva", Santiago de Compostela, Spain
SOURCE: Anales de Quimica (1968-1979) (1974), 70(4), 360-2
CODEN: ANQUBU; ISSN: 0365-4990
DOCUMENT TYPE: Journal
LANGUAGE: Spanish
AB The following derivs. of decorticasine (I) were identified in A. decorticans: N-depropionyldecorticasine (II), and 3 amides of II(butyramide (III), isobutyramide (IV), and isovaleramide (V)). III, IV, and V were identical with products obtained by synthesis. The following methods were used: m.p., m.p. of picrate derivs., thin-layer chromatog., and ir spectra.
IT 4839-19-4
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of Adenocarpus decorticans)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



L11 ANSWER 23 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1973:418920 CAPLUS
DOCUMENT NUMBER: 79:18920
ORIGINAL REFERENCE NO.: 79:3047a,3050a
TITLE: Alkaloids in Adenocarpus
AUTHOR(S): Landa Velon, Arsenio
CORPORATE SOURCE: Fac. Cienc., Univ. Santiago de Compostela, Santiago de Compostela, Spain
SOURCE: Acta Cientifica Compostelana (1971), 8(3-4), 171-6
CODEN: ACCCAW; ISSN: 0567-7378
DOCUMENT TYPE: Journal
LANGUAGE: Spanish
AB N-Depropionyldecorticasine (I) and its butyramide, isobutyramide, and isovaleramide were isolated from Adenocarpus decorticans and their structure confirmed by synthesis. I is present in the plant and is not

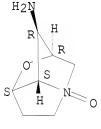
merely a hydrolysis product of the amides. Cinnamic acid-14C was not incorporated into adenocarpine in feeding tests.

IT 4839-19-4P
RL: PREP (Preparation)
(isolation of, from Adenocarpus decorticans)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



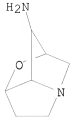
IT 42281-70-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 42281-70-9 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, 4-oxide, [2R-(2α,3α,3aβ,6aβ)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



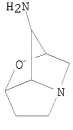
L11 ANSWER 24 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1972:434742 CAPLUS
DOCUMENT NUMBER: 77:34742
ORIGINAL REFERENCE NO.: 77:5795a,5798a
TITLE: Absolute configurations of pyrrolizidine alkaloids of the loline group
AUTHOR(S): Bates, R. B.; Morehead, S. R.
CORPORATE SOURCE: Dep. Chem., Univ. Arizona, Tucson, AZ, USA
SOURCE: Tetrahedron Letters (1972), (17), 1629-30
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Loline (I, R = Me, R1 = H), norloline (I, R = R1 = H), lolinine (I, R = Me, R1 = Ac), and decorticasine (I, R = H, R1 = EtCO), from 3 genera of the families Gramineae and Leguminosae, have the absolute configuration shown, as determined by x-ray crystallog.
IT 4839-19-4
RL: PRP (Properties)
(absolute configuration of)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-

(9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 25 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1969:78204 CAPLUS
DOCUMENT NUMBER: 70:78204
ORIGINAL REFERENCE NO.: 70:14609a,14612a
TITLE: Mass-spectrometric structural study of Lolium alkaloids
AUTHOR(S): Akramov, S. T.; Yunusov, S. Yu.
CORPORATE SOURCE: Inst. Khim. Rast. Veshchestv, Tashkent, USSR
SOURCE: Khimiya Prirodnykh Soedinenii (1968), 4(5), 298-304
CODEN: KPSUAR; ISSN: 0023-1150
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Mass-spectrometric data are given for loline (I, R = NHMe) and derivs. (R = H, OH, NH2, NMe-COMe, NNMe2, and NMeCOPh) and for dihydrodeoxyloline (II) and N-methyldihydrodeoxyloline (III). The fragmentation mechanism is discussed.
IT 4839-19-4
RL: PRP (Properties)
(mass spectrum of)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)- (9CI) (CA INDEX NAME)



L11 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1968:487265 CAPLUS
DOCUMENT NUMBER: 69:87265
ORIGINAL REFERENCE NO.: 69:16331a,16334a
TITLE: Identity of the alkaloid norloline with depropionyldecorticasine
AUTHOR(S): Ribas-Barcelo, M.; Ribas-Marques, I.
CORPORATE SOURCE: Univ. Santiago de Compostela, Santiago de Compostela, Spain
SOURCE: Anales de Quimica (1968-1979) (1968), 64(6), 637-9

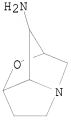
CODEN: ANQUBU; ISSN: 0365-4990
DOCUMENT TYPE: Journal
LANGUAGE: Spanish

AB Depropionyldecorticasine (I) dihydrochloride (CA 54: 14289d) was shown to be identical with norloline dihydrochloride (CA 64: 5152e) and the structure confirmed.

IT 4839-19-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(depropionyldecorticasine in relation to)

RN 4839-19-4 CAPLUS

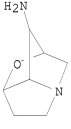
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



IT 20321-53-3P 20321-54-4P 20321-56-6P
20321-57-7P 20321-58-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 20321-53-3 CAPLUS

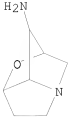
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, dihydrochloride, [2R-(2α,3α,3aβ,4α,6aβ)]- (9CI) (CA INDEX NAME)



●2 HCl

RN 20321-54-4 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, dihydrobromide, [2R-(2α,3α,3aβ,4α,6aβ)]- (9CI) (CA INDEX NAME)



●2 HBr

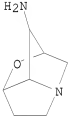
RN 20321-56-6 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, [2R-(2α,3α,3aβ,4α,6aβ)]-, dinitrate (9CI) (CA INDEX NAME)

CM 1

CRN 7697-37-2
CMF H N O3

CM 2

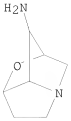
CRN 4839-19-4
CMF C7 H12 N2 O



RN 20321-57-7 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, [2R-(2α,3α,3aβ,4α,6aβ)]-, compd. with 2,4,6-trinitrophenol (1:2) (9CI) (CA INDEX NAME)

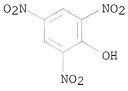
CM 1

CRN 4839-19-4
CMF C7 H12 N2 O



CM 2

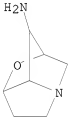
CRN 88-89-1
CMF C6 H3 N3 O7



RN 20321-58-8 CAPLUS
CN Carbonic acid, compd. with [2R-(2α,3α,3aβ,4α,6aβ)]-hexahydro-2,4-methano-4H-furo[3,2-b]pyrrol-3-amine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 4839-19-4
CMF C7 H12 N2 O



CM 2

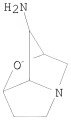
CRN 463-79-6
CMF C H2 O3

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1968:39878 CAPLUS
DOCUMENT NUMBER: 68:39878
ORIGINAL REFERENCE NO.: 68:7770h,7771a
TITLE: Papilinaceous alkaloids. XLV. Structure of decorticasine
AUTHOR(S): Ribas-Marques, I.; Pazo-Carracedo, M.
CORPORATE SOURCE: Fac. Cienc. Patronato "Juan de la Cierva", Santiago de Compostela, Spain
SOURCE: Anales de la Real Sociedad Espanola de Fisica y Quimica, Serie B: Quimica (1967), 63(9-10), 915-26
CODEN: ARSQAL; ISSN: 0034-088X
DOCUMENT TYPE: Journal
LANGUAGE: Spanish

AB It was previously established (CA 54: 14289d) that N-depropionyldecorticasine (I) mol. had an O bridge and a NH2 group. An attempt was made to eliminate both in order to identify the base C7H13N (II) which supports the tetracyclic skeleton of the alkaloid. The O bridge was opened and changed into a Cl and a OH group when 3.45 g. I.HCl was heated with 7 ml. 38% HCl 8 hrs. at 150°, to give 93% C7H13ClN2O.2HCl (III), m. 212-13° (MeOH); dipicrate m. 215-16° (EtOH), [α]18D -14.7° (c 0.95, pyridine); free base m. 104-5°. I was regenerated by treating III with strong alkali. Catalytic hydrogenation of 0.2 g. III in 10 ml. absolute EtOH over 1 g. Raney Ni until 25.3 ml. H was absorbed, purification of the reaction product as a base, by treatment of its CHCl3 solution with dry NH3 2 hrs., gave a picrate m. 214-15° (EtOH) of a compound to which the formula C7H14N2O (IV) was assigned. To a solution of 0.4 g. IV.HCl in 1 ml. 10% HCl, 0.2 g. NaNO2 in 2 ml. H2O was added at 0°, the solution neutralized with NaHCO3, evaporated to dryness over H2SO4, the residue extracted with absolute EtOH, the solvent evaporated, and this repeated twice, to give with alc. picric acid, 0.2 g. of a picrate, m. 246-7° (EtOH), corresponding to a base C7H11NO, whose ir spectrum showed the formation of a new O bridge. Due to this inconvenience an attempt was made to substitute the OH group of III with Cl, by treatment of III.-2HCl with a mixture of POCl3 and PCl5, but only a poor yield of C7H12N2Cl2.2HCl, sublimes above 300° (MeOH), was obtained. In an alternate method a solution of 0.2 g. III in 3 ml. 10% HCl was treated with 0.1 g. NaNO2 in 1.5 ml. H2O at 0°, the mixture alkalinized with aqueous NH3, extracted with CHCl3, extract dried, and evaporated to give 0.1 g. of a base, C7H12ClNO2 (V), [perchlorate m. 188-9° (EtOH), picrate m. 208-9° (MeOH-Me2CO)] which showed a Cl and 2 OH groups in the mol. To a solution of 0.4 g. V in absolute EtOH a solution of dry HCl in EtOH was added. The solvent evaporated, 2 ml. SOCl2 added, the mixture heated 2.5 hrs. on a water bath, and evaporated in vacuo, the residue treated with ice, the precipitate filtered off, the filtrate alkalinized with aqueous NH3, extracted 6 times with Et2O, and the ethereal exts. worked up, to give 0.27 g. of an oily base C7H10ClN (VI), picrate m. 194-5° (MeOH-Me2CO). A solution of 0.05 g. VI in 5 ml. EtOH was hydrogenated in the presence of 0.3 g. Raney Ni and 0.25 ml. NEt3 4 hrs.; work up of the mixture gave 0.05 g. II picrate, m. 255-6° (90% EtOH), which was identified as pyrrolizidine picrate by its ir spectrum and thin layer chromatog. over Silica gel G.

IT 4839-19-4P, Decorticasine, N-depropionyl-
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



L11 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1966:27742 CAPLUS
DOCUMENT NUMBER: 64:27742
ORIGINAL REFERENCE NO.: 64:5152e-h,5153a-h
TITLE: Structure of norloline, loline, and lolinine
AUTHOR(S): Akramov, S. T.; Yunusov, S. Yu.
CORPORATE SOURCE: Inst. Chem. Plant Products, Tashkent
SOURCE: Khimiya Prirodnykh Soedinenii (1965), (4), 262-71
CODEN: KPSUAR; ISSN: 0023-1150
DOCUMENT TYPE: Journal
LANGUAGE: Russian

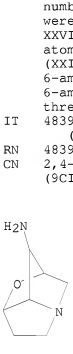
AB Formation of pyrrolizidine from loline established the basic heterocyclic nucleus of norloline and loline (CA 55, 19981f). In the present paper, data obtained during the investigation on the location of the 2nd valency of O and the N atom of the side chain are given in detail. Products of the Hofmann degradation of loline and dihydrodeoxyloline have been reinvestigated. Acetyl residue on the N in the side chain of dihydro-de-N-methylloline (I) was hydrolyzed with 20% HCl in a sealed ampul to give dihydro-de-N-methylloline (II). Oxidation of the latter with chromic acid (Percheron, et al., CA 52, 8848e) gave only one volatile acid, AcOH, as shown by paper chromatography. Formation of AcOH from II again proved that one valency of the O atom is linked to β carbon with relation to tertiary N atom of pyrrolizidine. Chromic acid oxidation of tetrahydrode-N-dimethyllolinone (III) gave acetic and propionic acids. Formation of EtCO2H from III proved that in the second stage of Hofmann degradation the link was broken at C-3 and not at C-7 as the authors earlier erratically assumed. It moreover proves that C-2 and C-3 atoms of the lolinine mol. do not have any substituents. Position C-1 in the lolinine mol. has either one valency of O atom or the side N atom, because if C-1 had been free from substituents, oxidation of III should have given butyric acid along with propionic. Hydrolysis of III with 30% H2SO4 gave dihydroxytetrahydrode-N-dimethylloline (IV) and tetrahydrode-N-dimethylloline (V). IV b2, 136-8°, [α]D 1.81° (MeOH) and V, b2 90°, [α]25D -21.79° (MeOH). IV is formed at the expense of the hydrolysis of ether linkage and the acetyl group on the side chain N atom, while V is simply formed by the hydrolysis of the acetyl group. V was methylated with HCHO + HCO2H by boiling for 10 hrs. on a water bath giving tetrahydrode-N-dimethyl-N-methylloline (VI), b2 93°, [α]29D 16.4° (MeOH). VI forms a mono- (VII), m. 128-9°, and a dimethiodide (VIII), m. 194°. VII does not undergo Hofmann degradation, while VIII smoothly undergoes this degradation. The N atom of the side chain breaks away and from the products formed was isolated the methiodide of tetrahydrohemiloline (IX). IX m. 133° and is optically active, [α]D -26.07° (MeOH). Tetrahydrohemiloline (X) is also formed in small amts. X, liquid, bb 84-5°, [α]20D 16.94° (EtOH). Chromic acid oxidation of X gave acetic and propionic acids which excludes the location of ether linkage and N atom on the same carbon C-1 of pyrrolizidine. If it was so, Hofmann

degradation of VIII would have given optically inactive IXa and X, or X which on oxidation would not have formed propionic acid. Rupture of N atom of the side-chain during the above degradation of VIII was established in another way also. Lolinine (XI) with EtI gives a crystalline ethiodide (XII), m. 117-18°, which on degradation gave de-N-ethyllolinine (XIII). XIII on catalytic reduction over Pt absorbed a mol. of H and gave dihydro-de-N-ethyllolinine (XIV) which with MeI gives a crystalline methiodide (XV), m. 218-19°. Further degradation of XV gave dihydrode-N-methylethyllolinine (XVI). The latter, on catalytic hydrogenation gave tetrahydrode- N -methylethyllolinine (XVII). Hydrolysis of the acetyl group of XVII with 20% H2SO4 gave tetrahydrode-N-methylethylloline (XVIII) which on methylation with HCHO + HCO2H gave tetrahydrode-N-methylethyl-N-methylloline (XIX). XIX with MeI forms a methiodide (XX), which on Hofmann degradation gives Me3N in quant. amts. at the expense of the N atom of the side chain. Thus, the Hofmann degradation of XI can be briefly depicted as follows: XI + EtI → XII → XIII → XIV → XV → XVI → XVII → XVIII → XIX → XX → (XXI) + NMe3.HCl. IXa on hydrogenation at a Pt catalyst gave a mixture of products from which was isolated the methiodide of hexahydrohemiloline (XXII), m. 126°, [α]D 16° (acetone), and a N-free compound, α-methyl-α'-ethyltetrahydrofuran (XXIII), in negligible amts. as well as trimethylamine-MeI. Hofmann degradation of tetrahydrohemiloline-MeI and XXII with freshly precipitate AgOH gave MeOH, tetrahydrohemiloline (XXIV), and hexahydrohemiloline (XXV), b5 97-8°, resp. For elucidation of the position of the N atom of the side chain, dihydrodeoxyloline (XXVI) was acetylated with AcCl to give N-acetyldihydrodeoxyloline (XXVII), which on repeated Hofmann degradations, hydrogenations, and subsequent hydrolysis gave octahydrodeoxyhemiloline (XXVIII). Chromic acid oxidation of XXVIII formed a number of volatile acids. Acetic, propionic, butyric, and valeric acids were identified by paper chromatography. Formation of valeric acid from XXVIII and other properties, allow the assumption that the side chain N atom is situated on C-6 in XXVI. In this way, the alkaloid norloline (XXIX) is 6-amino-1,5-oxypyrrolizidine, loline (XXX), 6-amino-N-methyl-1,5-oxypyrrolizidine, and lolinine (XXXI), 6-amino-N-methylacetyl-1,5-oxypyrrolizidine and the structure of these three alkaloids is as given.

IT 4839-19-4, Norloline
(structure of)

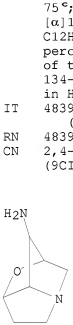
RN 4839-19-4 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



L11 ANSWER 29 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1961:106010 CAPLUS
DOCUMENT NUMBER: 55:106010
ORIGINAL REFERENCE NO.: 55:19981f-i,19982a
TITLE: Structure of norlolin, lolin, and lolinine. IV

AUTHOR(S): Yunusov, S. Yu.; Akramov, S. T.
SOURCE: Zhurnal Obshchei Khimii (1960), 30, 3132-7
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. CA 54, 24831c. Norlolin (Ia) had the suggested structure 2-aminotetrahydropyranomorpholinopyrrolizidine; lolin was 2-amino-N-methyltetrahydropyranomorpholinopyrrolizidine, and lolinine was 2-amino-N-methyl-N-acetyltetrahydropyranomorpholinopyrrolizidine. The finding of pyrrolizidine alkaloids in Lolium cuneatum was the 1st such occurrence among Gramineae plants. Lolinine methiodide treated with AgOH in MeOH gave 96.8% des-N-methyllolinine (I), C11H18O2N2, m. 50-1°, [α]16D -109.36°; HCl salt decomposed at 206°, [α]27D -23.1°, HBr salt decomposed at 260-1°; nitrate decomposed at 190°, [α]28D -28.6°; methiodide decomposed at 256-7°. The residual quaternary ammonium base left after the above degradation was treated with MeI in MeOH to yield lolinine methiodide, m. 136-7°. I heated 10 min. with concentrated HCl gave C8H13O2N.HCl, decomposed at 244-6°, which gave the free base, b5 93-4°, d20 1.1136, n20D 1.4910, [α]18D -30.98°. Hydrogenation of I over Pt gave dihydro derivative of I, C11H2OO2N2, m. 76°, b1 159°, d20 1.1233, n20D 1.5065, [α]21D 75°; perchlorate m. 203-5°; methiodide m. 230-1°, [α]14D 37.09°. The latter with AgOH gave 87% des-base, C12H22O2N2, b1 140-2°, 1.0266, 1.4869, [α]25D 95.43°; perchlorate m. 164-5°, [α]22D 89.81°. Hydrogenation of this base over Pt gave tetrahydrodes-N-methyllolinine, b1 134-6°, 0.9919, 1.4748, [α]16D 90.31°, which with CrO3 in H2SO4 oxidized to AcOH. Thus, norlolin had the structure Ia.
IT 4839-19-4, Norloline
(structure of)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



L11 ANSWER 30 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1960:129258 CAPLUS
DOCUMENT NUMBER: 54:129258
ORIGINAL REFERENCE NO.: 54:24831c-e
TITLE: Alkaloids of Lolium cuneatum. II
AUTHOR(S): Yunusov, S. Yu.; Akramov, S. T.
SOURCE: Zhurnal Obshchei Khimii (1960), 30, 677-82
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. Doklady Akad. Nauk Uzbek. S.S.R. 3, 27(1954); CA 50, 10750d. Seeds of L. cuneatum yielded a 4th new alkaloid, norlolin, C7H12ON2, b5 94-5°, [α]D16 15.1°; di-HBr salt decomposed at 306-8°, [α]D28 5.84°; carbonate m. 141°;

dinitrate m. 191-2°; di-HCl salt decomposed at 309-11°; dipicrate decomposed at 226°; N,N-di-Ac derivative b2 190-5° (picrate decomposed at 192-3°). Diazotizing norlolin and keeping the neutralized solution 1 day gave heminorlolin, C7H11O2N, m. 192°, [α]D21 8.09°; HCl salt m. 233-4°; HBr salt m. 189-90°; picrate m. 142-3°. Norlolin heated with formalin and HCO2H 3 hrs. gave dinorlolinomethane, m. 197-8°; dipicrate m. 126-30°. Norlolin gave an amorphous methiodide. Permanganate oxidation converted lolin to norlolin, while N-methyllolin was oxidized to lolin or norlolin. Norlolin contained a tertiary N group and a free NH2 group, which was diacetylated. Heminorlolin was C7H10ON(OH).

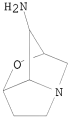
IT 20321-57-7
(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 20321-57-7 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, [2R-(2α,3α,3aβ,4α,6aβ)]-, compd. with 2,4,6-trinitrophenol (1:2) (9CI) (CA INDEX NAME)

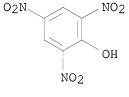
CM 1

CRN 4839-19-4
CMF C7 H12 N2 O



CM 2

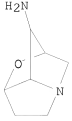
CRN 88-89-1
CMF C6 H3 N3 O7



IT 4839-19-4, Norloline
(and derivs.)

RN 4839-19-4 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)



L11 ANSWER 31 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1960:129257 CAPLUS
DOCUMENT NUMBER: 54:129257
ORIGINAL REFERENCE NO.: 54:24830b-i,24831a-c
TITLE: Constitution of rhoeadine
AUTHOR(S): Santavy, F.; Maturova, M.; Nemeckova, A.; Horak, M.
CORPORATE SOURCE: Palackeho Univ., Olomouc, Czech.
SOURCE: Collection of Czechoslovak Chemical Communications (1960), 25, 1901-13
CODEN: CCCCAK; ISSN: 0010-0765
DOCUMENT TYPE: Journal
LANGUAGE: German

AB On the basis of expts. (e.g., Hofmann and Emde degradations), polarography, and ultraviolet and infrared spectroscopy (spectra with interpretation given) a structural formula was proposed for rhoeadine (I), C21H21-NO6, m. 251-3°, [α]D22 235 ± 2° (c 1.01, CHCl3), 174 ± 2° (c 0.688, C5H5N), and 237 ± 2° (c 0.69, AcOH); HCl salt m. 224-6° (MeOH), [α]D22 214° (CHCl3); HBr salt m. 228-30° (MeOH), [α]D22 210° (CHCl3); HI salt m. 228-30° (MeOH), [α]D22 206° (CHCl3); methiodide (II) m. 215-17°, [α]D22 186 ± 3° (c 0.419, H2O). Detns. of C-Me group, active H, and double bond were neg. in I. Keeping 1 g. I, and 30 ml. 1% aqueous HCl 48 hrs. under exclusion of light, decanting the mixture to remove purple needles [m. 315-20° (decomposition) (aqueous HCl)], heating the aqueous solution 15 min. on a steam bath, precipitating with aqueous NH3, and crystallizing gave rhoeagenine (III), m. 236-8° (MeOH), [α]D22 134 ± 2° (c 0.96, C5H5N), 170 ± 2° (c 0.678, AcOH), 235 ± 5° (c 0.477, 0.1N HCl); HCl salt m. 205-7° (MeOH), [α]D22 233° (CHCl3); HI salt m. 207-9°, [α]D22 228° (CHCl3). Alkaline hydrolysis and acetylation expts. with I or III gave unchanged starting compds. Oxidation of I with aqueous KMnO4 in aqueous NaOH (Spath, et al., CA 30, 59979) gave hydrastic (IV) and isohydrastic (V) acids, isolated as IV Me imide, m. 213-18° (Et2O-petr. ether), IV Et imide, m. 170-3° (MeOH), and V Et imide (VI), m. 123-5°. Oxidation of III with aqueous HNO3 (Hope, et al., CA 25, 2149) gave hydrastinine and a brown precipitate whose oxidation with aqueous KMnO4 in aqueous NaOH yielded V, isolated as VI, m. 127-9°. Shaking 6 hrs. 2 g. II in 40 ml. MeOH with Ag2O (prepared from 2 g. AgNO3), filtering, evaporating the filtrate, and chromatographing the residue on Al2O3 gave des-N-methylrhoeadine (VII), m. 156-8°, [α]D22 -27 ± 3° (c 1.28, CHCl3). Refluxing 12 hrs. 2 g. VII, 20 ml. anhydrous CHCl3, and 3 ml. MeI, and evaporating gave a residue, which was dissolved in MeOH-Me2CO, the solution treated with an aqueous suspension of Ag2O (prepared from 2 g. AgNO3), shaken 4 hrs., filtered, the filtrate evaporated, the residue treated with 5 ml. (CH2OH)2, 0.2 g. NaOH, and 4 ml. H2O, and the mixture

slowly heated to 155° to yield Me3N [isolated as picrate, m. 214-16° (EtOH)], 0.6 g. desdesrhoeadine (VIII), m. 144-6° (EtOAc), [α]D22 17 ± 2° (c 1.02, CHCl3), and an unidentified compound, C20H16O6, m. 145-7° (CHCl3 or EtOAc), [α]D20 13 ± 3° (c 1.06, CHCl3). Heating on a steam bath 30 min. 660 mg. VII and 20 ml. 0.2N HCl, washing with CHCl3, and precipitating with aqueous NH3 gave the corresponding demethylated compound, C21H21NO6, m. 170-1° (CHCl3 or EtOAc), [α]D22 -37 ± 3° (c 1.08, CHCl3). Heating on a steam bath 30 min. 0.3 g. VIII, 2 ml. AcOH, 1 ml. H2O, and 1 drop aqueous HCl, diluting the mixture with H2O, extracting with CHCl3, and evaporating gave an amorphous compound, probably demethylated VIII. Hydrogenation of VII in AcOH on prereduced PtO2 gave des-N-methyldihydrorhoeadine (IX), m. 146-8° (EtOAc-petr. ether), [α]D26 -55 ± 3° (c 1.46, CHCl3). Hydrogenation (H-uptake 2.6 moles) of VIII on prereduced PtO2 and reduction of VII with Na in liquid NH3 gave amorphous products only. Treating IX successively with MeI and Ag2O, heating the filtrate in 10 min. to 150° with the addition of 1 pellet NaOH, extracting with Et2O, and evaporating gave Me3N and desdesdihydrorhoeadine (X), m. 104-6° (Et2O-petr. ether), [α]D26 60 ± 2° (c 1.160, CHCl3). Keeping 0.3 g. VII with MeI 5 days at room temperature, treating the VII methiodide obtained with AgCl in aqueous EtOH, filtering, treating the filtrate (containing VII methochloride) at 60° with 60 g. 3% Na-Hg in small portions (evolution of Me3N), heating the mixture 20 min. to a boil, extracting with Et2O, washing the extract with 1% aqueous H2SO4 and H2O, and evaporating gave VIII, m. 208-11° or 144-6° (EtOAc); both the crystals showed the same [α]D20 17 ± 2° (c 0.62, CHCl3). Similarly, IX methochloride and Na-Hg gave Me3N and X, m. 135-7° or 104-6° (EtOAc-Et2O); both the crystals showed [α]D24 58 ± 3° (c 0.438, CHCl3). Treating in 5 hrs. under ice-cooling 2 g. VII in 15 ml. Me2CO with aqueous KMnO4 gave a compound, C21H19NO7 (structure undetd.), m. 278-80° (EtOAc), [α]D22 240 ± 3° (c 0.798, CHCl3).

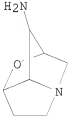
IT 20321-57-7
(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 20321-57-7 CAPLUS

CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, [2R-(2α,3α,3aβ,4α,6aβ)]-, compd. with 2,4,6-trinitrophenol (1:2) (9CI) (CA INDEX NAME)

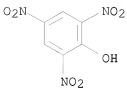
CM 1

CRN 4839-19-4
CMF C7 H12 N2 O

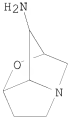


CM 2

CRN 88-89-1
CMF C6 H3 N3 O7



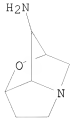
L11 ANSWER 32 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1960:74779 CAPLUS
DOCUMENT NUMBER: 54:74779
ORIGINAL REFERENCE NO.: 54:14289c-f
TITLE: Papilionaceae alkaloids. XXXIII. Alkaloids of Adeno-carpus decorticans. The chemistry of decorticasine
AUTHOR(S): de Lama, J. M. Alonso; Lopez-Blanco, A.; Ribas, I.
CORPORATE SOURCE: Univ. Santiago Compostela, Spain
SOURCE: Anales de la Real Sociedad Espanola de Fisica y Quimica, Serie B: Quimica (1959), 55B, 717-30
CODEN: ARSQAL; ISSN: 0034-088X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB cf. CA 53, 20106e. Decorticasine (I), a viscous oil, [α]18D 26.1° (5.64%, EtOH), isolated from the leaves of A. decorticans by Ribas and Barreiro (CA 48, 3987i), was assigned the formula C10H16N2O2; picrate, yellow, m. 227° (Me2CO); hydriodide, m. 202° (Me2CO); nitrate m. 178–179° (MeOH–Me2CO); methiodide m. 242° (absolute EtOH). Hydrolysis of I in 10% HCl for 3 hrs. yielded propionic acid and a base, N-depropionylcorticasine (II), C7H12N2O (CA 48, 3987i); di-HCl salt m. 305–10° (MeOH); di-HBr salt, needles, m. 306–308° (EtOH); mono-HI salt, m. 157° (MeOH); di-HI salt, sheets m. 290° (MeOH); dinitrate, m. 198–9° (EtOH); perchlorate, m. 166–7° (MeOH). II with EtCOCl yielded synthetic decorticasine. The chemical properties of I are discussed to elucidate its structure. II treated with HNO2 yielded a new base, deaminated N-depropionyldecorticasine (III), C7H11NO2, m. 190–1° (Me2CO), [α]21D 25.08° (3.11%, absolute EtOH); HI salt, needles, m. 146–8° (Me2CO); methiodide, m. 204–5° (Me2CO); perchlorate, m. 196–8° (Me2CO); HCl salt, hygroscopic, m. 225–30° (absolute EtOH). Infrared absorption spectra were used in correlating structures between I, II, III. These and other expts. suggested possible structures.
IT 4839-19-4, Decorticasine, N-depropionyl- (and derivs.)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)- (9CI) (CA INDEX NAME)



L11 ANSWER 33 OF 33 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1960:56486 CAPLUS
DOCUMENT NUMBER: 54:56486
ORIGINAL REFERENCE NO.: 54:11028i,11029a-h
TITLE: Structure of norloline, loline, and lolinine
AUTHOR(S): Yunusov, S. Yu.; Akramov, S. T.
SOURCE: Doklady Akademii Nauk UzSSR (1959), (No. 4), 28-31
CODEN: DANUAO; ISSN: 0134-4307
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB For the purpose of establishing the site of decomposition of the "bridge" ether-like O and side-chain N for norloline(I), loline(II), and lolinine(III), the Hofmann elimination was carried out, since the side N in III was acetylated and thus protected. By the action of Ag2O on the methiodide of III, de-N-methyllolinine(IV), m. 50-1°, [α]D16 -109.39, was obtained; hydrochloride m. 200° (decomposition); nitrate m. 190° (decomposition), picrate m. 132-3°. The compound was unsatd. and had the formula C7H9(NMe)(NMeAc)(O). The quaternary ammonium base of III was obtained, together with the de-base, as a side product of the Hofmann elimination; the former compound did not liberate H2O at 120-30°/2 mm. and did not evaporate It was easily converted to the initial methiodide derivative of III by the action of MeI and KI. Possibly during the decomposition, the trans configuration of the quaternary ammonium base was formed, which was not capable of liberating H2O with the formation of the de-base. On treatment with HCl, IV liberated the NMeAc group with the formation of a saturated compound This was attributed to the fact that one valency of the ether-like O was bound on one side with a C atom (in the β-position with respect to the tertiary N atom). With the formation of a double bond between C4 and C5 in IV, the bond of the ether-like O (with respect to acids) apparently became unstable, whereas II and III under these conditions remained unchanged. An excess of HCl resulted in a "hydroamine" decomposition In the hydrogenation of II by the Adams method, 1 mole H was absorbed to yield dihydro-de-N-methylloline (V), m. 76°, [α]D21 -75° (MeOH); hydrochloride m. 203-5°; methiodide m. 230-1°. The 2nd step of the Hofmann elimination of V with methiodide took place normally with the formation of dihydro-de-N,N-dimethyllolinine (VI), b2 140-2°, [α]D25 94.43 (MeOH), forming, with difficulty, a crystalline HCl salt, m. 164-5°. Catalytic hydrogenation of VI yielded tetrahydro-des-N,N-dimethyllolinine (VII), b2 134-6°, [α]D16 90.31 (H2O), forming an amorphous methiodide. It was impossible to carry out the Hofmann elimination of VII; this indicated that H was absent at the β-C with respect to N. Consequently, the 2nd valency of the ether-like O and the valency of the side N atom were bound to the β-C atom. Oxidation of VII with chromic acid yielded 2 AcOH mols. This indicated that in the 1st step the bond of N was ruptured at the C4 atom and in the 2nd step at the C7 atom (3 AcOH mols, would have been obtained if rupture had taken place at the C3 atom). The 1st de-base of lolinine gave a qual. reaction for pyrrole. All products of the Hofmann elimination were optically active. The ether-like O was located at the C2-O-C5 position and the side N atom at C2 or C3, since both C atoms occupied identical positions with respect to the tertiary N atom. Since II was a mono-N-methyl derivative of I, the latter had the structure as given. The formula showed that I, II, and III were derivs. of pyrrolizidine on the one hand, and derivs. of morpholine-pyran on the other.

IT 4839-19-4, Norloline
(structure of)
RN 4839-19-4 CAPLUS
CN 2,4-Methano-4H-furo[3,2-b]pyrrol-3-amine, hexahydro-, (2R,3R,3aS,4S,6aS)-(9CI) (CA INDEX NAME)




```
=> FIL STNGUIDE
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   205.84     638.65

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -28.71     -33.06

FILE 'STNGUIDE' ENTERED AT 23:33:49 ON 03 AUG 2011
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2011 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jul 29, 2011 (20110729/UP).

=>  d his

     (FILE 'HOME' ENTERED AT 23:21:57 ON 03 AUG 2011)

     FILE 'REGISTRY' ENTERED AT 23:24:30 ON 03 AUG 2011
L1                STRUCTURE UPLOADED
L2              3 S L1 SSS FULL

     FILE 'CAPLUS' ENTERED AT 23:25:41 ON 03 AUG 2011
L3              5 S L2

     FILE 'REGISTRY' ENTERED AT 23:30:37 ON 03 AUG 2011
L4                STRUCTURE UPLOADED
L5             58 S L4 SSS FULL

     FILE 'CAPLUS' ENTERED AT 23:31:14 ON 03 AUG 2011
                S L4

     FILE 'REGISTRY' ENTERED AT 23:31:18 ON 03 AUG 2011
L6              6 S L4

     FILE 'CAPLUS' ENTERED AT 23:31:18 ON 03 AUG 2011
L7              4 S L6

     FILE 'CAPLUS' ENTERED AT 23:31:43 ON 03 AUG 2011
L8             46 S L5
L9             36 S L8 AND PY<2006
L10            34 S L9 AND PY<2005
L11            33 S L10 AND PY<2003

     FILE 'STNGUIDE' ENTERED AT 23:33:49 ON 03 AUG 2011
```